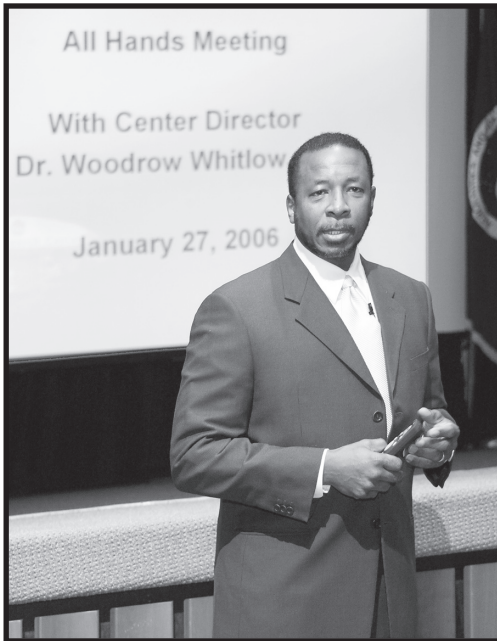


# AEROSPACE *Frontiers*

Volume 8 Issue 3 March 2006



C-2006-381

Photo by Marvin Smith

*Dr. Whitlow's All Hands meeting focused on an independent assessment of the center's ability to perform exploration-related work.*

## Dr. Whitlow reports organizational readiness review findings

BY DOREEN ZUDELL

During his All Hands meeting on January 27, Center Director Dr. Woodrow Whitlow shared highlights of the recent organizational readiness assessment of Glenn, citing high marks in technical competence.

Chartered and sponsored by the Office of Program Analysis and Evaluation, the assessment team consisted of representatives from NASA Headquarters, Johnson Space Flight Center and NASA Glenn, as well as consultants.

They assessed the overall readiness of Glenn to perform liquid oxygen/methane (LO<sub>x</sub>/CH<sub>4</sub>) propulsion tasks assigned by the Exploration Systems Mission Directorate (ESMD) and to recommend measures to improve and strengthen Glenn's ability to take on a larger role in supporting the Vision for Space Exploration missions.

A major finding concluded that Glenn has appropriately assigned high priority to the LO<sub>x</sub>/CH<sub>4</sub> Propulsion Advanced Technology Development (ATD) Project. The team found Glenn's technical and project management work force assigned to this effort to be qualified, displaying a high level of motivation and enthusiasm.

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## FY2007 budget rollout: A look toward NASA's future

BY S. JENISE VERIS

The rollout of President George W. Bush's \$16.8 billion Fiscal Year (FY) 2007 budget request on February 6 affirmed his commitment to making the Vision for Space Exploration, initiated just 2 years ago, become a reality.

"There's never enough money to do all the things you want to do," said NASA Administrator Michael Griffin during the budget briefing, "but, there's enough money to support the President's vision and to complete the International Space

Station (ISS). We must set our priorities and adjust our spending to match those priorities."

Griffin shared the following priorities to demonstrate NASA's commitment to the Vision for Space Exploration:

- NASA will continue assembly of the ISS while fulfilling our international partner commitments and using the minimum number of space shuttle flights prior to its scheduled retirement in 2010.

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Learn details on *AeroSpace Frontiers* new electronic distribution

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Name this column and win lunch with the Director!

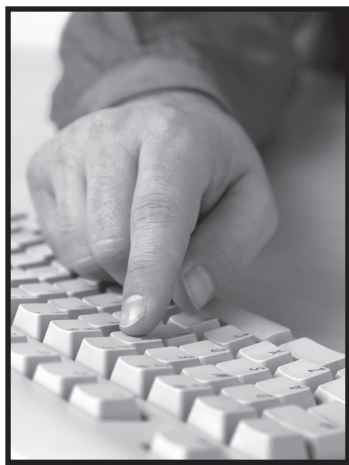
**HURRICANE RELIEF ..... 6**  
Employees answer the call to help hurricane victims

**FORMER DIRECTOR DIES ..... 11**  
Bruce Lundin, Center Director from 1969 to 1977, recently died.

# AeroSpace Frontiers to arrive at your desktop

"...disconnecting from change does not recapture the past. It loses the future."—Kathleen Norris, U.S. poet and farmer

As NASA transitions to meet the challenges of the Vision for Space Exploration, Glenn's *AeroSpace Frontiers* (AF) is evolving too. Beginning in April, the monthly newsletter will be delivered to your office or home through the Internet.



To view AF online, visit  
<http://aerospacefrontiers.grc.nasa.gov>

Three years ago, Glenn acknowledged the trend toward electronic news reporting by offering AF online in a Portable Document Format (PDF). Many readers have found it to be a convenient and fast way to learn about Center accomplishments and employee activities.

"As Glenn moves through this period of transformation, the need for innovation and cost savings becomes vital," explained AF Editor Doreen Zudell, SGTI/Community and Media Relations Office, External Programs Directorate. "For AF, this means electronic distribution (with limited printed copies) and a decrease from 12 to 8 pages each month. These changes will enable us to continue to bring our readers the same quality they have come to expect over the years."

The AF staff is working with the Center's information technology experts to make the transition from print to electronic distribution as seamless as possible. Beginning with the April edition, employees will receive an e-mail containing the URL that will take them directly to the newsletter Web site. There they can view and print the issue in its traditional format.

AF realizes that offsite readers, especially our valued retirees, need a convenient and reliable way to access the newsletter each month. AF is providing an electronic notification for offsite readers as well through e-mail distribution. Offsite readers are asked to send their e-mail address to [grc-aerospacefrontiers-public-request@lists.nasa.gov](mailto:grc-aerospacefrontiers-public-request@lists.nasa.gov) by March 24 to become an electronic subscriber.

For retirees without Internet access, AF is offering a *limited* number of printed copies. Retirees interested in being assigned to this distribution list should contact AF at 216-433-3089 immediately. These subscribers will continue to receive the issue in their mail on the regularly scheduled basis.

John Hairston, director of External Programs, noted that budget constraints often present an opportunity to make improvements within an organization. "AF is a very important communications tool to all of Glenn's audiences," he said. "We look forward to creating a new and better product because of these challenges, and we hope to have our readers' continued support." ♦

## Review called workforce highly trained, technically capable

Continued from page 1

Whitlow affirmed that these characteristics are vital to the Center securing future exploration projects. "We have a highly trained and technically capable staff that is ready to be deployed on meaningful work that supports the Vision for Space Exploration."

While the assessment team found the work force capable of supporting the vision, the team concluded that the Center needs to better position itself as a meaningful contributor to the pursuit of the vision. This is attributed primarily to the conclusion that adding senior management with space flight experience would strengthen the Center.

"The fact that our managers don't have vast amounts of experience in develop-

ing space flight hardware is through no fault of their own. This is something different than what we have concentrated on in the past," Whitlow explained. "Now that we will be supporting larger-scale space flight development projects, we need to augment our leadership team with people with this type of experience."

The report noted, however, that the Center's latest experience with micro-gravity science programs has nurtured a cadre of high-quality project managers. Although most of these projects are smaller-scale payloads, the experience of managing a complete project cycle is valuable.

"Our project managers have an impeccable performance record on space

projects," Whitlow said. "Now we need to further develop our core of program managers."

While Glenn has been a hybrid Center of space and aeronautics and of research and development, the assessment team noted that the current organizational design might benefit from some changes to allow for more efficient large space flight system development.

Based on these observations, the assessment team made the following recommendations:

- Redesign Glenn's organizational structure to consolidate discipline expertise and establish clear lines of

Continued on page 8



# Budget request focuses on NASA's priorities

Continued from page 1

•Pending the results of STS-121, the second of two test flights in NASA's



Photo by S. Jenise Veris

*Deputy Director Rich Christiansen, Director Whitlow and Associate Director Bob Fails answered budget-related questions from area reporters after Administrator Griffin's briefing.*

return to flight, the shuttle may conduct a fifth servicing mission to the Hubble Space Telescope.

•NASA will bring the Crew Exploration Vehicle (CEV) online no later than 2014, and potentially sooner.

•The budget provides \$5.3 billion for NASA's Science missions (a 1.5 percent increase over FY2006), \$724 million for Aeronautics Research, \$3.98 billion for Exploration Systems, \$6.2 billion for Space Operations, and almost \$500 million for new Cross-Agency Support Programs to leverage commercial industry and development of the unified agencywide management systems to get NASA's finances in better order.

By establishing these priorities, NASA leadership envisions an opportunity for all the NASA centers to contribute to Exploration.

The 1.5 percent shift in previous plans for NASA Science still provides for 56 space missions including satellite missions to make scientific measurements of changes in our oceans and land resources; test instruments for the next-generation of polar-orbiting weather satellites; monitor solar flare impacts on the Earth's magnetosphere; landing the next generation of rovers on Mars; and peering

into the farthest reaches of the universe with the Hubble and James Webb space telescopes.

In the absence of a robust space nuclear research and development program as previously planned under Prometheus, NASA Exploration Systems will leverage the work of other nations who have developed small nuclear reactors. The liquid oxygen/methane (LO<sub>x</sub>CH<sub>4</sub>) program and other supporting technologies not directly contribut-

ing to near-term development of the CEV have been reduced. Other major Exploration Systems FY2007 activities include Commercial Crew/Cargo Project development, the Communications and Navigation Project, and the Lunar Reconnaissance Orbiter design review.

Despite an 18 percent decrease compared to FY2006, the FY2007 Aeronautics budget reestablishes NASA's dedication to the mastery of core competencies in subsonic, supersonic, and hypersonic flight and preservation of NASA Wind Tunnels as critical assets to the Agency and the Nation. Future projects will be aligned under three integrated research programs—Fundamental Aeronautics, Aviation Safety and Aeronautics Testing—including the Next Generation Air Transportation Systems assessment.

Cross-Agency Support Programs is a new direct budget category focusing on several ongoing activities including an improved model for managing NASA's unique facilities. Programs are aligned under four themes—Education, Advanced Business Systems, Innovative Partnership and Shared Capabilities. Major activities for FY2007 will focus on creating a pipeline of students excelling in science, technology, engineering, and

math disciplines; upgrading SAP Version agencywide; and integrating partnership programs.

Major undertakings of the Space Operations FY2007 budget includes aggressively pursuing U.S. commercial cargo crew services; launching eight Expendable Launch Vehicles primary payloads; and continuing activities leading to an orderly phase-out of the space shuttle and transition to the CEV. Over the next few months, NASA will evaluate industry proposals for the CEV, revise the cost estimates, and find workforce synergies and efficiencies between the shuttle and CEV launch systems to refine estimates for feasibility of bringing the CEV online.

"The NASA management team has been working on the issues and means to rebuild NASA to have 10 healthy centers known for technical greatness," Griffin said. "We continue to define program management and research roles and responsibilities for each center in carrying out NASA's missions of space exploration, scientific discovery and aeronautics research."

After the briefing, Glenn's Center Director Dr. Woodrow Whitlow, addressed questions by the local media. He explained that while Glenn's share (\$380 million) of the FY2007 will enable the Center to maintain aeronautics expertise through in-house fundamental research and aviation safety and air traffic systems projects, the Center is looking forward to assuming a larger role in Exploration.

"We are seeking work that will serve as background to compete for CEV and the Crew Launch Vehicle as well as actively competing for work not yet assigned to the centers," Whitlow said. "While work on the LO<sub>x</sub>/CH<sub>4</sub> program is no longer a priority in the Exploration architecture for the near-term lunar missions, it is considered one of the options for NASA's future missions to Mars and beyond."

For more details, log on to <http://www.nasa.gov/about/budget/index.html>. ♦

## Senator Glenn promotes Glenn-OSU partnerships

Center Director Dr. Woodrow Whitlow hosted Senator John Glenn and a contingent of senior personnel from The Ohio State University (OSU) to expand strategic partnerships between the Center and OSU. Dr. Robert McGrath, senior vice president of research, led the OSU team. NASA Glenn and OSU have identified a number of areas for emphasis in initial collaboration efforts including aer propulsion and power, development and storage, high-temperature materials, sensor development, nanotechnology and supercomputing.



C-2006-351



C-2006-358

*Pictured, above: Senator Glenn with Center management and OSU representatives met to discuss strategic partnerships. Above, right: Senator Glenn toured the center's Crew Exploration Vehicle service module mock-up during his visit. Senator Glenn offered his support and encouragement for the center to secure a leadership role in the development of the service module by signing his name on the mockup.*

## 2005 CFC awards



Photo by Marvin Smith

C-2006-396

During the Director's Leadership Team Meeting on February 7, Combined Federal Campaign (CFC) Chairperson Bernice Beznoska, Project Control and Support Branch, presented Center Director Dr. Woodrow Whitlow with three awards from the Northeast Ohio CFC. Glenn's 2005 campaign efforts were reflected in the following awards: 100 percent Dollar Goal, Director's Award for Excellence and Outstanding Campaign. The Center was also one of the four "superagencies" that together collected 80 percent of the total \$2.2 million northeast Ohio CFC goal. The Glenn Inspector General's Office received the following awards for this campaign: 100 percent Participation, 100 Percent of Goal and Director's Award for Excellence.

*Pictured, left to right, CFC Co-Chairperson Eric Overton, Electro-Physics Branch; Beznoska; Dr. Whitlow; and CFC Loaned Executive Jose Guerra, Prototype Development Branch, with awards.*

The NASA Glenn Business and Professional Women (BPW) along with the Women's Advisory Group and Singleton Health Services promoted the American Heart Association (AHA) "Go Red" day on February 3. The campaign emphasized that heart disease and stroke are the greatest health threats women face. Healthy heart literature was distributed with AHA red dress pins that day and women wearing red gathered for a group photo to show support for this awareness campaign.

## Go Red day



C-2006-396

Photo by Marvin Smith

## Foodbank

In January, members of BPW participated in community outreach in which they helped package food and other donated items at the Cleveland Foodbank. These items were distributed to Cleveland-area families in need. Pictured are BPW members Bonita Jeffery, left, Applications Branch, and Erline Trsek, Aeronautics Division, packaging items at the Cleveland Foodbank.



Photo by Julie Porter



## From the Director

### We're up for the challenge

In Administrator Michael Griffin's fiscal year FY2007 budget briefing on February 6, he reported a 3.2 percent increase over NASA's FY2006 appropriated budget. That's good news for the Agency—but what does it mean for us at Glenn?

Initially, we face some serious challenges because our Center's \$380 million proposed budget represents a 27 percent decrease from FY2006. However, it's important to remember that the \$380 million is a preliminary figure. Since much work within the Agency has yet to be assigned, we will have opportunities to acquire new work based on our outstanding technical competence.

As I noted in my January 27 All Hands meeting, our capabilities were recently affirmed through an independent assessment that was overwhelmingly positive. The assessment team found our work force to be "qualified, motivated, and enthusiastic" and that Glenn has the capacity to do significant work in support of space exploration.



C-2006-402

Photo by Marvin Smith

*Dr. Whitlow in front of the full-scale Crew Exploration Vehicle service model mock-up in the Fab Shop.*

Over the next several months, our ability to capture and perform significant work will greatly govern the long-term size of our work force. My goal is to not just preserve jobs at this center; rather, it's to bring meaningful work for us to do. And speaking of work force—you may remember that the FY2006 budget request called for a reduction of 700 FTE's at Glenn. Thankfully, that number has been significantly reduced in the FY 2007 budget.

## Name the Director's column

Win lunch with Dr. Whitlow!

Center Director Dr. Woodrow Whitlow is looking for your creative ideas in helping him name his monthly Director's column in *AeroSpace Frontiers*. All employees (civil servant and support service contractor) are invited to submit ideas to be considered for the column's name. Entries must be sent by e-mail (Doreen.Zudell@grc.nasa.gov) or interoffice mail (MS 3-11) by 4:30 p.m., on March 31, to Doreen Zudell, editor. The winning entry will be announced in the May issue, and the winner will share lunch with the Director on a date to be determined.

The Administrator has committed to having 10 healthy NASA centers. As your director, I promise to work hard to ensure that Glenn has a major role in the future of this agency. So I ask employees to take a bow for your hard work and accomplishments. I'm proud of your efforts and proud to be your director. But now it's time to pull up our shirtsleeves and get ready to tackle the challenges that lie ahead of us. I know we're up for it! ♦

## News Notes

**LESA MEETING:** LESA/IPFTE, Local 28, will hold its next monthly membership meeting on March 8, at noon in the Employee Center.

**THIRD SATURDAY AT THE VC:** On Saturday, March 18, Glenn's Visitor Center (VC) will present "Voyages to Mars" from 10 a.m. to 3 p.m. During the 11 a.m. and 1 p.m. presentations, visitors will learn about the Red Planet and the current rover status and celebrate the arrival of the Mars Reconnaissance Orbiter. Other highlights include free photos available in the Picture Yourself in Space photo booth, kids make-and-take crafts, and plenty of handouts. For more information and reservations, call 216-433-9653 or log on to [glenn.events.grc.nasa.gov](http://glenn.events.grc.nasa.gov).

**SPRING SEMINAR:** Cleveland Chapters of ASMC, AGA and OSCP is sponsoring a spring seminar on Monday, March 20, at the Crowne Plaza Cleveland City Centre. A variety of presentations will be offered. Eight Continuing Professional Education credits will be awarded for participation. The full agenda and registration information is available at [www.agacleveland.org](http://www.agacleveland.org). Deadline registration is March 15.

**PM CHALLENGE:** Join your NASA colleagues at PM Challenge 2006, the third annual NASA project management (PM) conference from March 21 to 22, at the Moody Garden Hotel & Conference Center in Galveston, Texas, near the Johnson Space Center. The conference will feature plenary session speeches from

NASA Administrator Michael Griffin and other high-ranking NASA officials. The conference will also have 12 tracks with nearly 100 speakers. To register, log on to <http://pmchallenge.gsfc.nasa.gov>.

**AFGE MEETING:** AFGE Local 2182 will hold its next monthly membership meeting on April 5, at 5 p.m., at Denny's Restaurant, 25912 Lorain Road, North Olmsted. All members are encouraged to attend.

**RETIREMENT CELEBRATION:** Come wish Mary Beth Celebrezze of the Financial Management Division well on her retirement. A celebration will be held on Thursday, April 6, from 1 to 3 p.m. in Building 500. For more information, contact Blanche Preusser, 3-2528.

Continued on page 11

# Employees answer the call to aid hurricane victims

BY S. JENISE VERIS

Last fall, shortly after Hurricane Katrina struck the nation's Gulf Coast, 13 Glenn employees volunteered for a 30-day detail to assist in what has become a long process of recovery. Most of the volunteers had no idea of how or where their services would be utilized; they just wanted to help in any way possible.

The Glenn delegation was part of a coalition of civil servants from federal agencies across the nation sent to the Federal Emergency Management Administration (FEMA) Center in Atlanta or Florida. There they were trained and deployed to other areas besides New Orleans, including Alabama, Florida, Mississippi, and Texas, which suffered different degrees of devastation due to Hurricanes Rita and Wilma.

Now back from their assignments, nine of those volunteers shared stories with *AeroSpace Frontiers* about what they saw and did, and how their expectations differed from the reality they experienced.

A few, like Jim Gaier and Kevin Konno, envisioned digging through piles of debris, moving sandbags and performing search and rescue missions after witnessing the devastation on television. Instead, they discovered that they, like the majority of Glenn volunteers, would serve as Community Relations specialists spending 12-hour days in the tedious and often heart-wrenching process of registering victims for health and relief benefits.



Storm damage from Hurricane Rita south of Beaumont along the coastline near Sabine Pass, Texas.

"I was a little nervous about where and with whom I would work, and what I could accomplish," said Eric Stevens, who served at the Disaster Relief Center (DRC) set up at the Martin County Fairgrounds in Stuart, Fla. "But I couldn't have picked a more competent and diverse group of volunteers to work with."

Although training varied, most of the Glenn volunteers received what David Diamond described as a "crash course" in community relations activities. This included how to: (a) approach people of diverse populations; (b) use FEMA's software package to log claims; (c) administer first aid for heat stroke as well as bug, snake and alligator bites; and (d) identify and avoid potential hazards, such as downed power lines.

The damage was unpredictable and widespread in Florida where Stevens, Diamond and Mike Micham were deployed.

"Wilma hit, followed by a 6-foot tidal wave. People were literally washed out of their homes and left with nothing," said Diamond, who led a group assigned to the Florida Keys.

As a former firefighter for Glenn and emergency medical technician, Micham was prepared for the worst, but the living conditions of some of the subdivisions brought him close to tears. "I went door-to-door over a 40-mile radius handing out a list of available services," he explained. "During my travels, I found families forced to double up in trailers because most of the mobile homes, tattered from previous storms, were now completely destroyed by Wilma."

Like Micham, Mike DePauw found a wide assortment of damage, from minor to severe wind damage in Washington and Baldwin counties in Alabama, to complete devastation in Bayou La Batre, Ala., and all of the coastal areas of Mississippi.

"I drove for over an hour along the coast of Mississippi," DePauw said. "There wasn't a livable building within a mile from the coast; nothing but piles of rubble."

In Texas, Konno saw the effects of 140-mph winds. In San Augustine,



Left, Gail Perusek in the Emergency Operations Center sleeping quarters in Beaumont, Texas. Above: Eric Stevens, back center, with members of his FEMA team, representing five different government agencies, in Stuart, Fla.



Konno observed mostly trees toppled over on houses, but found these areas to be relatively quiet, far removed from the coast or heavily populated cities. In the city of Beaumont, Texas, Gail Perusek found a stark contrast to Konno's experience.

"It was very difficult the first week—12-hour days with no power and a 4-hour roundtrip commute back to Houston," Perusek recalled.

"After that, I got a sleeping bag and air mattress and moved into base camp, the Emergency Operations Center. Routine activities such as doing laundry and sitting down for a hot meal were pretty much out of the question. It really made me realize how important it is to have your basic needs met."

Mark Hickman was deployed to New Orleans' Birmingham Interim Housing Facility where he served as a facility specialist.

"While I didn't experience the physical devastation wrought by Katrina, I saw many devastated people," he said. "We housed people from all over the Gulf Coast, but most of our residents were evacuees from an area of poverty and desolation that existed before Katrina."

Humans weren't the only ones Katrina displaced. Owners, who could not bring pets along to hotels or shelters, were forced to leave thousands of animals to fend for themselves.

### Glenn's FEMA Volunteers

Deborah King, Mission Support and Integration Office; Tracy Cantley, J. Mark Hickman, Kevin Konno, Gail Perusek, Paul Solano and Eric Stevens, Engineering Development Division; David Diamond, Luann Keys, Bernard Loyer and Michael Micham, Facilities Division; Michael DePauw, Research Testing Division; and James Gaier, Power and Electric Propulsion Division

Glenn's FEMA Point of Contact: Jim Giomini, Office of the Director



*Clockwise, (1) Luann Keys with stray dog; (2) Keys caring for one of the many animals at the Humane Society's Camp Katrina located on a 5-acre site in Tylertown, Miss. (3) A local woman shows her gratitude by cooking for Kevin Koono and other volunteers in the DRC located in the San Augustine, Texas, courthouse; (4) Koono, center, joins a security guard and his team lead outside the courthouse.*

Luann Keys spent two of three trips to New Orleans rescuing pets reported missing or trapped, and caring for injured horses and livestock as a trained certified responder with FEMA's animals' disaster team.

"We tried to coax out the dogs with cat food, but they would often run and hide under an abandoned house, where we were unable to save them," Keys explained. "So we left food and water, and spray painted messages on the houses such as '2 dogs under house-F/W, 10/1.' "This was our way of recording that food and water was left on a certain date."

Keys' third tour was volunteering as a FEMA technical monitor to certify trailer installations for people who lost their homes.

The Glenn volunteers said they experienced many revelations during their tours. What seemed most poignant, however, was the kindness and generosity of the evacuees. Although many people were left with just the clothes on their back, they were often more concerned about how the FEMA volunteers were coping.

Gaier reflected that the whole trip was a growth experience that began the moment he met others training in Atlanta. "As federal employees, we share a common culture—an attitude of service," he explained. "Serving the public is a natural extension of what we do on a daily basis." ♦

# Premier messaging system will offer numerous features

BY DOREEN ZUDELL

Imagine an electronic messaging system that can be accessed from any computer and location, secure instant messaging that can be sent to anyone in the agency and the ability to easily share calendars and schedule meetings with other employees. These features and more are on the horizon for Glenn users through a new Centerwide messaging system that is expected to be fully operational by summer.

"In an effort to improve and standardize information technology services across the agency, Glenn is migrating to a Microsoft Exchange-based messaging system that will offer more stability and features to Glenn users," said Chief Information Officer Dr. Sasi Pillay.

The Microsoft messaging system, which is being utilized by several NASA centers with a high degree of satisfaction, will replace the aging Eudora-based e-mail and the Meeting Maker calendaring system.

"Microsoft Exchange is a premier messaging system that is widely used throughout government and industry," explained Tony Facca, Information Systems Division. Facca has been working with Johnson Space Center as Glenn's project manager on the NASA Enterprise Messaging Project. The current effort, known as Continuous Operations Messaging (COM), is the initial implementation of the Agency services.

Facca said the new messaging system brings an integrated e-mail, calendar, scheduling and task management solution to Glenn. The system includes vastly improved services for mobile users. Outlook Web Access provides secure remote access to mail, calendars and tasks from anywhere using a Web browser and an Internet connection. Outlook Mobile Access supports Smartphones and wireless devices. In addition, Glenn users will have access to a secure instant messaging service (Windows Messenger), further enhancing communications among other users of the new messaging system.

When complete, the new Agency messaging system will provide integrated service to each of the Space Operations Mission Directorate centers, Glenn, and Headquarters. Other centers are expected to migrate when their existing systems require replacement. The development and ongoing operations will be managed through NASA's ODIN contractor.

While some end-user training is required and will be made available in the near future, Facca said the new interface will be familiar to many users and has been favorably reviewed by early adopters of the service at Glenn.

Web-based tutorials are now accessible by logging on to <http://www.grc.nasa.gov/WWW/COM/>. The Web site provides information for users interested in becoming part of pilot testing that is underway.

Customers can also stop by the COM Café located in the Research Analysis Center, room 186. This staffed drop-in room offers a wide range of services—from a general overview to resolving end-user issues—for those interested in learning more about COM. The room is equipped with two PCs and a Macintosh for hands-on help with Outlook, Entourage, and/or Thunderbird, a television with DVD and VHS players for multimedia training materials and published reference books. A variety of hot beverages are available for users enjoyment as well. A COM expert is on hand to assist users on Tuesdays and Thursdays from 1:30 to 4 p.m. and on Fridays from 8:30 to 11:30 a.m. If these hours are not convenient, call 3-6245 (E-MAIL) to schedule an appointment.

"By standardizing on a common messaging system, not only will Glenn users get the same service as other centers, but we will also be able to leverage our re-



Photo by Doreen Zudell

*Consumer Advocate Linda McMillen, Environments Branch, aids Dennis Cay, Knowledge Management and Collaborative Technologies Branch, in the COM Café.*

sources by sharing the costs," Pillay said. "Everyone benefits in service improvements and cost savings." ♦

## Readiness review

Continued from page 2

communication, responsibility and authority necessary to perform a major space flight development assignment

- Recruit and assign experienced space flight systems personnel to key project-management positions

- Commit [NASA] to assigning significant space flight project work to Glenn

- Recruit and assign experienced space flight systems development personnel to key directorate head and division chief positions

- Establish and implement an integrated Human Capital Management Plan that enhances programmatic and technical capability

- Develop and implement a plan to achieve compatibility between the engineering design, analysis, and project management systems, tools, and processes to be employed by Glenn and partner centers to execute space system development assignments

"I am committed to making Glenn a healthy, vibrant Center," Whitlow said. "We have the work force necessary to make significant contributions to the Agency's mission, and I will continue to work with our leadership to be sure that Glenn has a major role in making NASA's vision a reality." ♦

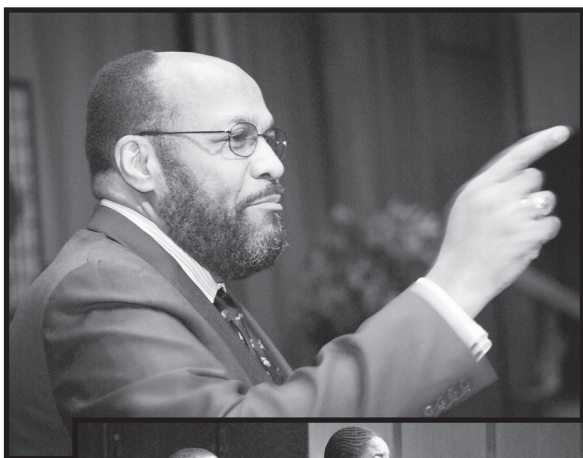


# Local activists speak on great African-American leaders

BY S. JENISE VERIS

Glenn's Office of Equal Opportunity Programs (OEO) highlighted the contributions of two of the most celebrated Black Americans in 20<sup>th</sup> Century history and Black fraternal organizations during two recent programs.

C-2006-386



C-2006-407



C-2006-385

Photos by Marvin Smith

*Clockwise: Rev. Dr. McMickle extols the criteria for greatness; Councilwoman Turner reminds the audience that we have two hands; and the Cleveland School of Arts Choir performs one of several soul-rendering songs.*

On January 25, the Rev. Dr. Marvin McMickle, senior pastor of Antioch Baptist Church of Cleveland and professor of Homiletics at Ashland Theological Seminary, discussed the value of the great person approach to studying history. He used the lives and sacrifices of Dr. Martin Luther King (MLK) and Rosa Parks, as examples, during Glenn's Sixth Annual MLK Equality Recognition Ceremony.

McMickle explained that most people learn history based on a linear or chronological approach—an event happened on such date. The theory behind the great person approach, however, is to

study and better recall a historical event by equating a great person's role in the cause or affect of the event that happened. McMickle shared his criteria for determining who should be considered great.

"The mark of greatness is not in those who take on a sure thing, but rather, those who choose to take on a large substantive problem at great risk (to person, family, or position)—when lesser souls observed the problem but chose to ignore it because they understood success was not a certainty."

McMickle said the same criteria applies to NASA's greatness. He noted how NASA engineers and astronauts such as John Glenn take on the tasks of launching to the frontiers of space at great risk when others are not willing to persevere because success is not assured.

During the event, OEO recognized the participants of an essay contest that was conducted to commemorate Parks' legacy to the civil rights movement. Alvie McKnight, SGTI/Office of the Chief Counsel, won first place and presented her essay. OEO also recognized North Olmsted's Mayor Tom O'Grady for providing a replica of the bus on which Parks

was arrested because she refused to give up her seat to a white man.

Added highlights of the event included a video presentation of MLK's life, produced by Carmen Marrero, OEO, and a performance by the Cleveland School of the Arts Choir directed by Dr. William Woods.

On February 8, Cleveland Council Member Nina Turner, Ward-1, delivered a tribute to the "heroes and sheroes" of Black fraternal, social and civic organizations in her speech for Glenn's Black History Month Observance.

Turner, who is also a Cuyahoga Community College history professor and performing poet, recounted the contributions of Alpha Phi Alpha, the oldest black Greek fraternity, and Prince Hall, an Order of the Masons, as well as the late Coretta Scott King.

"These organizations served as catalysts to help black Americans not only survive, but also thrive in a society of our early American History that did not embrace its darker brother and sisters," Turner said. "America has made great progress to become one of the greatest countries in the world, but it can be greater."

Recalling the words of her grandmother, Turner encouraged the audience to "make use of the hands God gave us—one to reach out and one to reach back—to help others and work towards making America greater." ♦

## Award



Dr. MacKay

Dr. Rebecca MacKay, senior materials scientist in the Materials Science and Structures Division, received the NASA Engineering and Science Center (NESC) Director's Award, the highest award given by NESC, during an award ceremony held on January 31 in Orlando. MacKay was honored for her work on the Reaction Control System thruster cracking issue and on her root cause evaluation for the conical seal pitting in the vertical tail of the shuttle orbiter, which is critical to Return to Flight efforts.

## Promotion



Pouliot

Barbara Pouliot has been named chief, Resources Analysis and Management Office (RAMO). Pouliot joins Glenn following 25 years of service with the United States Air Force (USAF) as a civilian employee. Most recently, Pouliot served as Air Base Wing executive manager at Edwards, Air Force Base, Calif. She brings to RAMO an extensive background in management and finance including serving as a supervisory management and program analyst, resources management officer, administrative officer and equal employment manager. Pouliot also worked in various administrative positions at the USAF and the Veterans Administration. She holds an MBA degree from Golden Gate University in San Francisco and is a graduate of the Air University's Department of Defense Professional Military Comptroller Course.

## VC holds astronaut memorial

On January 28, the 20th anniversary of the *Challenger* accident, Glenn held a public memorial at the Visitor Center (VC) to acknowledge the seven astronauts who lost their lives pursuing the exploration of space. In addition to remembering *Challenger*, the memorial honored the astronauts who perished in the Apollo fire and Space Shuttle *Columbia* accident, as well as all other members of the NASA family who have lost their lives in the pursuit of knowledge.

During the event, Glenn engineer Jeffrey Woytach, Space Propulsion and Mission Analysis Office, spoke on the topic of "Space Heroes." The presentation highlighted the roles these crews played in expanding the nation's reach beyond the confines of Earth, in the exploration of the moon, and in our quest for scientific knowledge.



Photo by Monica Boyd

Many of the 350 visitors stopped by to view a computer kiosk with a Columbia memorial tribute.

Throughout the day, visitors viewed the astronaut memorial wall located in the VC lobby. Visitors were also encouraged to spend time in the human space flight gallery, where the Combustion Module-2 Crew Trainer and the "Mission Support Center" console are located. The trainer, used by the *Columbia* crew, has been dedicated to their memory, and the console includes an STS-107 post-flight multimedia presentation on "Explorations in Microgravity." ♦

I wish to thank employees and the many retirees who expressed condolences at the death of my husband, Robert "Bob" English. NACA-NASA was a powerful influence on Bob's life for over 50 years. He was truly dedicated to his work.

—Ruth English

I would like to thank everyone who contributed leave to me while I care for my wife. The prayers, good wishes, kind words and donations of leave have helped our family during this very difficult time. Thank you all very much.

—Chris Conrad and Family

## Special Children's Fund

The Special Children's Fund Committee would like to thank employees for their generous contributions to the 2005 Special Children's Fund campaign. Three families of NASA Glenn employees benefitted from the donations. The committee is currently looking for volunteers. They meet annually in October and February. For more information, contact Suzanne Aldrich, 3-9473.

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DEADLINES: News items and brief announcements for publication in the April issue must be received by noon, March 17. The deadline for the May issue is noon, April 14. Submit contributions to the editor via e-mail, doreen.zudell@grc.nasa.gov, fax 216-433-8143, phone 216-433-5317 or 216-433-2888, or MS 3-11. Ideas for news stories are welcome

but will be published as space allows. View us online at <http://AeroSpaceFrontiers.grc.nasa.gov>.





## In Memory



Lundin

Bruce Lundin, 86, NASA Lewis-Glenn Center Director from 1969 to 1977, passed away on January 24. With the exception of an appointment at NASA Headquarters from

May 1968 to March 1969, first as the deputy and subsequently acting associate administrator for Advanced Research and Technology, Lundin worked his entire 34-year career in Cleveland.

"We are saddened to lose one of this Center's outstanding leaders," said Glenn Director Dr. Woodrow Whitlow. "Doctor Lundin left his mark on this Center, when he guided the Laboratory through World War II and into the space age."

A native of Alameda, Calif., Lundin began his scientific career with Lewis in 1943 when it was part of the then National Advisory Committee for Aeronautics (NACA). He was initially engaged in research on aircraft engine cooling heat transfer and improving the performance of World War II aircraft engines. By 1946, he was conducting pioneering research on turbojet engines, including development of the afterburner, variable-area nozzle and reverse thruster to make planes fly higher and faster.

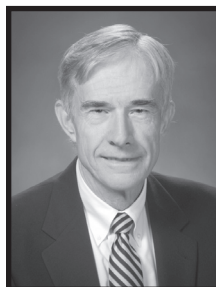
Lundin was appointed chief of the Engine Research Division in 1952 where he was responsible for the full-scale engine program. Work under his leadership over the next several years contributed significantly to the performance and reliability of today's commercial transport and supersonic aircraft jet engines. He also pioneered research on large-scale ramjet engines.

In October 1958, when NACA transitioned to the present National Aeronautics and Space Administration (NASA), Lundin was appointed an Assistant Director of the Center with

much responsibility for Lewis' expanded role in space propulsion and power generation. This role was expanded in December 1961 when he was appointed Associate Director for Development. His responsibilities included development of turbojet engines, chemical rockets, electric thrusters for spacecraft propulsion, and electric power-generating systems for spacecraft using chemical, solar and nuclear energy sources. He also directed the development and operation of NASA's Centaur and Agena launch vehicles for unmanned spacecraft and of spacecraft for investigating advanced methods of space propulsion.

Lundin was the recipient of numerous awards and honors including NASA's Distinguished Service Medal, the National Space Club's Astronautics Engineer Award, and selection to the National Academy of Engineering.

Tom Biesiadny, 67, Chief of the Inlet & Nozzle Branch in the Propulsion Systems Division, died on January 29.



Biesiadny

During his nearly 43 years of NASA service, Biesiadny provided technical and administrative leadership in conducting technology research to improve performance, design and analysis capabilities of gas turbine engine inlets and nozzles in support of aeronautics and space programs.

Biesiadny led development efforts specifically in Advanced Propulsion Concepts, Small Turbine Engine Technology and the Hypersonic Wind Tunnel. Along with his technical competence, Biesiadny was well respected for his managerial style.

According to Propulsion Systems Division Chief Dr. Dhanireddy Reddy, Biesiadny always managed to inspire a great sense

of stability and optimism in his staff even through periods of constant changes in programmatic priorities and downward budget trends.

"Tom Biesiadny was a branch chief that you wanted to give your best effort because it was very clear that he wanted the best for his employees. He sought opportunities for our branch to be engaged in meaningful NASA projects, and always made sure we received recognition for a job well done," said Nick Georgiadis, a member of Biesiadny's staff. "He also was an outstanding example of a gentleman and a person of the highest integrity."

As a NASA technical expert for inlet and nozzle technologies, Biesiadny aided Center management in planning and execution of related programs while ensuring alignment of long-range goals with the Center and the Agency's strategic plan.

James Goan, 74, who retired in 1981 with 26 years of NASA service, recently died. Goan served as a supervisory firefighter at the Center.

## News Notes

Continued from page 5

**EARTH DAY EVENTS:** Glenn's Earth Day Committee is planning activities to celebrate the annual Earth Week event, tentatively scheduled for April 19 to 21 in the cafeteria, and April 23 at Earthfest at the Zoo. Meetings are open to all Glenn employees on Wednesdays from 11 a.m. to noon, in Building 6, room 119 to help make plans for the event. For further details, contact Dave Forth, 3-3032.

**BPW SCHOLARSHIPS:** The NASA Glenn Business and Professional Women (BPW) has local, state and national scholarships available for women who are currently attending or plan to attend an accredited university or course of study. For further information, contact Bonita Jeffery, 3-9817.

# Local students connect to ISS via ham radio

BY S. JENISE VERIS

St. Albert the Great School in North Royalton enjoyed a unique opportunity to talk to International Space Station (ISS) Commander William McArthur via ham radio transmission through the Amateur Radio on ISS (ARISS) program on January 11.



Photo by Glenn Lindawood

Seventeen of the 18 students participating asked questions during the approximately 10-minute pass, while more than 800 of their classmates and nearly 400 faculty members, parents and friends filled St. Albert Church.

The ARISS application process was initiated by the late George "Art" Anzic, a NASA employee and former member of the NASA Glenn Amateur Radio Club (NGARC).

"Art was an active member of St. Albert's parish and enjoyed sharing his time at the school," said NGARC President Nancy Hall, Microgravity Division. "After he died, NGARC got involved in the application and staging of the event at the request of St. Albert's technology instructor Michelle Gross."

During the event, Hall served as the control operator for NA8SA, the NGARC call sign. She was aided by several ham radio operators and NGARC members to ensure

a successful contact with NA1SS, the space station call sign. They include Phil Jenkins (OAD), Power and Electric Propulsion Division; Al Tucholski (SLD), Mike Robertson, Research Testing Division; Glenn L. Williams, Engineering Development Division; and Tom Somsak, HTSI/ Logistics and Technical Information Division. In addition, Jim Fitzgerald, OKSU/ Educational Programs Office, presented a 35-minute program on NASA Space Exploration.

The response to a series of questions prepared by the students offered the audience an interesting view of the activities onboard the ISS. In response to the question, "How does the ISS crew intend to clean up human-generated trash orbiting Earth?" McArthur confessed that he and crewmate Valery Tokarev would be doing just the opposite.

"As a matter of fact, not only are we not going to clean up the space junk, we're even adding to it," he said. "...We plan

*Above, left: ISS Commander McArthur at the controls of NA1SS. Above: St. Albert students await their queue from Hall, third from front, and fellow NGARC members Jenkins and Tucholski with ISS Commander McArthur as the other students look on.*

to throw away a whole spacesuit while we're on a spacewalk next month."

McArthur explained that the surplus Russian Orlan space suit wouldn't initially be trash. Instead, it will become "Suit-Sat-1," an unusual transmit-only satellite.

The school's principal, Tom Brownfield, dedicated the event to Anzic's memory.

*Editor's note:* The ISS crew members released the spacesuit-turned-satellite on February 2. It transmitted recorded greetings in six languages to ham radio operators for about two orbits of the Earth before it stopped transmitting.

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